

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICANT: JOHN KOLLAR :  
SERIAL NO. 08/567,564 : Examiner Werren B. Lone  
FILING DATE: DECEMBER 5, 1995 : Art Unit 1204  
TITLE: PREPARATION OF DIALKYL :  
PEROXIDES  
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Asst. Commissioner for Patents  
Washington, D.C. 20231

**PROTEST UNDER 37 CFR §1.291(a)**

**Introduction**

Protester, ARCO Chemical Technology, L.P. ("ACT"), hereby protests allowance of the captioned application because the invention claimed therein had been offered for sale by or on behalf of applicant, John Kollar, more than one year prior to the December 5, 1995 filing date of the captioned application. More specifically, Kollar made this offer to an ACT affiliate, ARCO Chemical Company ("ACC"), in 1987 and eight years earlier to Celanese Corporation.

Among the technology offered by Kollar to ACC and Celanese was a process for the production of ditertiary-butyl peroxide (DTBP). This is the same process claimed in the captioned application (hereinafter "Kollar Application").

Proof of these offers to ACC and Celanese are contained in the papers filed by Kollar in the captioned application.

## Statement of Facts

### 1. The Kollar Application

The captioned Kollar Application was filed by Kollar on December 5, 1995 to provoke an interference with U.S. Patent No. 5,371,298 ('298 patent) assigned to ATC. A formal request by Kollar for declaration of an interference pursuant to 37 C.F.R. § 1.607 (a)-(d) was filed April 24, 1996 (hereinafter "Request"). This Request was supported by a submission under 37 C.F.R. § 1.608(b) ("Rule 608 Submission") and a Declaration of John Kollar ("Kollar Declaration"), all of which contain information confirming an invalidating offer to ACC and Celanese.

Both the Kollar Application and the '298 patent contain similar disclosures of a DTBP process. They differ only in the use of the DTBP made in accordance with that process. The Kollar Application focuses on use of the DTBP as a radical generator in Kollar's process for production of ethylene glycol (pages 2-3, Examples 3, 7-11) and only minimally as a cetane enhancer for diesel fuel (page 3, lines 10-11).<sup>1</sup> The '298 patent focuses exclusively on use of DTBP as a cetane enhancer.

As admitted in the Kollar Application (p. 1, lines 20-23), the preparation of dialkyl peroxides such as DTBP by the claimed reaction of tert-butyl alcohol (TBA) and an organic hydroperoxide such as tertiary hydroperoxide (TBHP) is known. The alleged contribution of the Kollar Application (pp. 4-5) is use of a solid, highly cross-linked, heterogeneous, acidic ion

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<sup>1</sup> Kollar is the patentee on several patents, circa 1983, covering EG processes based on the reaction of methanol and formaldehyde in the presence of an organic peroxide, preferably DTBP. See U.S. Patent Nos. 4,337,371; 4,393,252; 4,412,084 and 4,412,085.

exchange resin to catalyze that reaction.<sup>2</sup>

2. Kollar's Offer to Sell  
The Claimed DTBP Process

Kollar's April 24, 1996 filings confirm that the claimed DTBP process was offered to ACC and Celanese as part of the EG process that Kollar started promoting over 15 years ago. More particularly, Kollar's April 24, 1996 Rule 608 Submission (pages 13-15) describes a 1979 disclosure of Kollar's ethylene glycol (EG) process to Celanese Corporation by Kollar's wholly owned corporation, Redox. By Kollar's own admission, the DTBP step of that process was a commercially viable process. As noted in the Kollar Declaration (¶7):

"At this time [of the 1979 disclosure to Celanese] the commercial aspects of the DtBP invention were recognized by me and incorporated in a Redox EG Process disclosure agreement between Redox and Celanese Corp."<sup>3</sup>

The commercial, versus experimental, nature of the DTBP step is further borne out by the detailed description of that step provided to Celanese under its 1979 agreement with Redox. Exact operating conditions, heats of reaction, vapor pressures and heat capacities of the DTBP reaction were disclosed to Celanese (Exhibit 3 to Kollar Declaration).

The commercial nature of the DTBP process offered Celanese is confirmed by Celanese's reports on its evaluation of that process. The Kollar Declaration (¶8) notes that such reports describe "various aspects of commercial tBHP alkylation to DtBP [which] are attached hereto as Exhibit '4'." The referenced Exhibit 4 contains a "Detailed Process Flow Diagram" including

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<sup>2</sup> This catalyst is the focus of the '298 patent on which the Kollar Application is based.

<sup>3</sup> Emphasis added throughout unless otherwise indicated.

detailed cost estimates underlying a "Case Study for Plant Capacity Times 1.49" (Exhibit 4 to Kollar Declaration, p. 6).

Protester understands that Celanese paid substantial sums to Redox/Kollar for the right to commercially implement Redox' EG process, including the disclosed DTBP step. The payments by Celanese were wasted, however, because Celanese decided not to commercialize Kollar's (Redox) EG process.

Redox then offered this commercial EG process to ACC, which paid Redox \$20,000 for a "look-see" at the process (see paragraph 4 of 4/23/87 ARCO-Redox Agreement - Exhibit 6 to Kollar Declaration). The DTBP step of this disclosure appears to be identical to that offered to Celanese.<sup>4</sup> ACC, like Celanese, found the process wanting and did not pursue the process beyond the limited "look-see" it paid for.

3. ARCO Independently Developed  
The Subject Matter of The '298 Patent

Kollar attempts to distract attention from its invalidating offers for sale to ACC and Celanese with arguments that ACC derived the invention of the '298 patent from him via the 1987 disclosure from Redox (Rule 608 Submission, pp. 16-22). That is not so because ACC's inventors independently developed the subject matter claimed in the '298 patent. (See page 1, last paragraph of ACC's 11/21/95 letter to Kollar attached as Exhibit C to the Rule 608 Submission).<sup>5</sup>

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<sup>4</sup> This disclosure to ACC is attached as Exhibit 7 to the Kollar Declaration. A perusal of same shows that it is slightly expanded version of Redox' disclosure to Celanese (Exhibit 3 to the Kollar Declaration).

<sup>5</sup> Even before the inventors of the '298 patent discovered this invention, another ACC scientist, E. Hazbun, had proposed an identical process to make DTBP (see ACC's 11/21/95 letter attached as Exhibit C to Rule 608 Submission). This earlier (1981) work by Mr. Hazbun further dilutes Kollar's derivation argument.

Kollar's derivation argument, however, presents him with a real dilemma. If he successfully argues that the 1987 disclosure by Redox to ACC fully disclosed the subject matter claimed in the Kollar Application, that disclosure qualifies as a full anticipation of those claims.<sup>6</sup>

4. If The Proofs Of Prior Invention  
Submitted By Kollar Are Deemed  
To Be A Disclosure Of The '298  
Patent Claims And/Or Counts, Then  
The Counts Are Unpatentable To  
Applicant under 35 U.S.C. §102(b)

As just noted, Kollar relies upon his sketchy reference to a "strong acid ion exchange resin" to support his claim to prior invention of the proposed count reciting a specific ion exchange resin which is "at least 10% cross linked". If that prior invention assertion is accepted by the PTO, the count proposed by Kollar must be declared invalid to Kollar because he and his assignee, Redox, offered the DTBP process covered by those counts to Celanese and ACC years before the 1995 filing of his '564 application.

As shown in the following chart, the Redox disclosure made to Celanese and ACC corresponds to each of the elements of the count proposed by Kollar (Kollar Interference Request, p. 2).

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<sup>6</sup> There is some question whether Redox (Kollar) ever disclosed the degree ("at least 10%) of cross-linking in the ion exchange resin initially recited in the '298 patent claims and copied into the claims of the Kollar Application. The only description of record of the resin disclosed to ACC appears in Exhibit 7 (p. 1) to the Kollar Declaration in the following very broad terms which do not mention any degree of cross-linking in the catalyst:

"Alkylation is effected by strong acid ion exchange resin of the sulfonic acid type preferably with the macro recticular [sic-macroreticular] structure that is most beneficial for organic reactions. Other solid acids are also effective and do not require removal of the organics by distillation which is our preferred operating conditions."

<u>PROPOSED COUNT</u>		<u>DISCLOSURE TO CELANESE AND ACC</u> (Exhibits 3, 7 to Kollar Declaration)
A process for the preparation of a dialkyl peroxide which comprises		"T-butyl hydroperoxide (tBHP) is alkylated with isobutylene to DtBP in the liquid phase in the presence of strong acid ion exchange resin" (Ex. 7, p. 6)
<p>reacting a reactant selected from the group consisting of an alcohol having the formula ROH,</p> <p>an olefin having the formula</p> $\begin{array}{c} R^2 \quad R^3 \\   \quad   \\ C = C \\   \quad   \\ R^2 \quad R^3 \end{array}$ <p>and mixtures</p>		isobutylene
with an organic hydroperoxide having the formula R <sup>1</sup> OOH		t-butyl hydroperoxide
in the presence of an effective amount of an acid, at least 10% cross-linked, ion exchange resin catalyst		"Alkylation is effected by a strong acid ion exchange resin of the sulfonic acid type preferably with the macroreticular structure that is most beneficial for organic reactions"
R and R <sup>1</sup> being alkyl groups having [sic-up] to 10 carbon atoms, and R <sup>2</sup> and R <sup>3</sup> being hydrogen or R		

### ARGUMENT

It is an elementary tenet of Patent Law that one cannot hedge one's inventive bets by offering an invention for sale in 1979 and still obtain patent protection 20 years later. As explained by the Federal Circuit in W.L. Gore and Associates Inc. v. Garlock, Inc., 721 F.2d 1540 (Fed. Cir. 1983), cert. denied 469 U.S. 851 (1984):

"Early public disclosure is a linchpin of the patent system. As between a prior inventor [Kollar] who benefits from a process by selling its product but suppresses, conceals, or otherwise keeps the process from the public, and a later inventor [ACC] who promptly files a patent application from which the public will gain a disclosure of the process, the law favors the latter" Id.

In a case factually analogous to this, the Federal Circuit in D.L. Auld Co. v. Chroma Graphics Corp., 714 F.2d 1144 (Fed. Cir. 1983), invalidated a method patent because the inventor's assignee "attempted to profit from use of that method by offering some of those samples for sale to a number of potential buyers well before the critical date." Id. at 1147.

The court so ruled even though the method itself had remained inaccessible to the public, stating:

"Where a method is kept secret, and remains secret after a sale of the product of the method, that sale will not, of course, bar another inventor from the grant of a patent on that method. The situation is different where, as here, that sale is made by the applicant for patent or his assignee." Id. at 1147-1148.

See also Pickering v. Holman, 459 F.2d 403, 406 (9th Cir. 1972) ("Commercial exploitation of the product of a secret process or machine constitutes public use, regardless of whether the process or machine could have been known by familiarity with the product"); Mathis v. Hydro Air Industries Inc., 1 U.S.P.Q.2d 1513, 1525 (C.D.Calif. 1986), aff'd without op., 818 F.2d 874 (Fed. Cir.), cert. denied, 484 U.S. 826 (1987) ("public use includes commercial exploitation by the inventor of a machine or process, even though the machine or process is kept secret.").

It is well understood and taken for granted that any offer to sell an invention more than one year before the patent application is filed, whether secret or not, will invoke the on sale bar, "if circumvention of the policy animating §102(b) is to be avoided." D.L. Auld, 714 F.2d at 1148.

Kollar's fifteen year delay in filing for patent protection violates all policy considerations underlying 35 U.S.C. §102(b).

These underlying policies include: (1) discouraging removal of inventions from the public domain which the public justifiably comes to believe are freely available; (2) favoring prompt and widespread disclosure of inventions; (3) giving the inventor a reasonable amount of time following the sales activity to determine the value of a patent, *see In re Caveney*, 761 F.2d 671, 676 (Fed. Cir. 1985), and (4) prohibiting an extension of the period for exploiting the invention.

King Instrument Corp. v. Otari Corp., 767 F.2d 853, 860 (Fed. Cir. 1985). It is eminently unfair for Kollar to attempt removal of this DTBP process from the public domain more than fifteen years after offering it to Celanese. Fifteen years was more than enough time for Kollar to determine the value of his process (or lack of same, *supra*, p. 3). By waiting until late 1995 to seek patent protection he is effectively seeking another 20 years of exclusivity to exploit his invention. That delay runs counter to the policy favoring "prompt" disclosure of inventions.



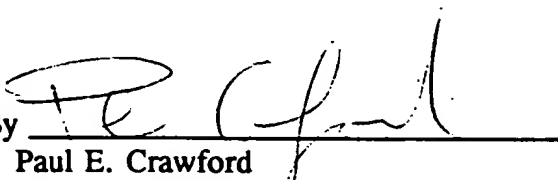
### CONCLUSIONS

The proposed count is invalid to Kollar because of his earlier efforts to sell the DTBP process corresponding to that count. Other claims in the Kollar Application suffer the same infirmity and should be rejected under 35 U.S.C. §102(b).

Respectfully submitted,

CONNOLLY AND HUTZ

By



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**CERTIFICATE OF SERVICE**

This is to certify that the foregoing PROTEST UNDER 37 CFR §1.291(a) was served on applicant of U.S. Patent Application No. 08/567,564, John Kollar, by mailing a copy of same, first class mail, postage prepaid, to his attorney of record in that application at the following address:

Raymond M. Speer, Esq.  
Klauber & Jackson  
411 Hackensack Avenue  
Hackensack, NJ 07601

on this 27<sup>th</sup> day of January, 1997.

A handwritten signature in dark ink, appearing to read 'P. E. Crawford', is written over a horizontal line.

Paul E. Crawford